OPTIMASI KLARIFIKASI EKSTRAK AIR *Stevia rebaudiana* (Bert.) DENGAN METODE ELEKTROKOAGULASI MENGGUNAKAN ELEKTRODA Al DAN Zn

*OPTIMIZATION OF CLARIFICATION Stevia rebaudiana (*Bert.*) WATER EXTRACT BY THE ELECTROCOAGULATION METHOD USING Al AND Zn ELECTRODES*

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ABSTRACT

In this research, clarification of S. rebaudiana extract with electrocoagulation method has been done to optimize the clarification of S. rebaudiana extract solution based on electrode type, time, and electric current, and to determine the content of stevioside and rebaudioside A from the optimization result of S. rebaudiana using High-Performance Liquid Chromatography. Clarification of S. rebaudiana by electrocoagulation method was performed using Al and Zn (3×15 cm) optimized electrode with optimized electric current variation at 0.4-2.0 A and time variation for 7.9-22.1 minute. Based on the results of the research, the optimal clarification condition of S. rebaudiana extract solution was obtained by using Al electrode at 13.6 minutes and an electric current of 0.8 A with clarification percentage of 93.88% while using Zn electrode at 17.5 minutes and current electricity by 0.8 A with clarification percentage of 85.37%. Levels of stevioside and rebaudioside A in S. rebaudiana solution that has been clarified by electrocoagulation method using Al electrode of 450.178 µg/mL and 1452.046 µg/mL while using Zn electrode of 482.44 µg/mL and 1665.287 µg/mL.

Keywords*: clarification, electrocoagulation, Stevia rebaudiana* (Bert.)